

- 1 -

piece 1, NC_000913, rplU_ispB-, config: linear, direction: -, begin: 3331761, end: 3331454

The diagram illustrates the rplU-ispB operon. The top part shows the DNA sequence with transcription start sites indicated by asterisks (*). The bottom part shows the corresponding amino acid sequence for each gene. The rplU gene is transcribed from left to right, starting at position 3331680. The ispB gene is transcribed from right to left, starting at position 3331600. The reading frames are indicated by colored arrows above the amino acid sequence. A red box highlights the first 10 codons of the ispB gene, labeled as 'orff 10 codons'. A green box highlights the start of the rplU gene. Red dots indicate start sites for both genes.

... ----->] sd-(14)-ir 3331671 Gap 4.9 bits [###] orf 7 codons ir rplU_ispB

The diagram illustrates the *rplU_ispB-* operon. It features two promoters: p35 (4.1 bits) at the top and p10 (1.4 bits) at the bottom. The *rplU* gene is located between the two promoters. A dashed line indicates the transcription start site for each promoter. Below the promoters, a red box highlights the *ispB-* gene. The *ispB-* gene contains several regulatory elements, including a green box labeled 'ir rplU_ispB-' and a blue box labeled 'ir rplU'. The DNA sequence is shown as a ladder-like structure with various colored segments representing different nucleotides.

The figure displays two horizontal timelines representing bus activity. The top timeline shows a sequence of events: a read from `sd` (labeled `sd-(17)-ir 3331637`), followed by a gap of 6.5 bits indicated by a red dashed box, and then a write to `sd` (labeled `sd-(9)-wr 3331654`). The bottom timeline shows a read from `sd` (labeled `sd-ir 3331654 rpl0_ispB- total 6.5 bits`) followed by a write to `sd`.

[###> orf 18 codons p35 5.5 bits

6.3 bit

5' * * 3331510 * * 3331500 * * 3331490 * * 3331480 * * 3331470 * * 3331460 *

- ala - leu - - - - - fMet - cys - ala - glu - ala - glu - phe - tyr - met - tyr - ala - val - phe - gln -

- - - - - - lys - arg - cys - ala - arg - lys - arg - ser - phe - ile - cys - thr - arg - phe - ser - lys -

- - - - - - fMet - arg - gly - ser - gly - val - leu - tyr - val - arg - gly - phe - pro - lys -

